UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,240	10/07/2005	David Lloyd Danielson	DC5120 PCT1	8813

137 7590 10/02/2008

DOW CORNING CORPORATION CO1232
2200 W. SALZBURG ROAD
P.O. BOX 994
MIDLAND, MI 48686-0994

EXAMINER	
COOLEY, CHARLES E	

ART UNIT	PAPER NUMBER
1797	

NOTIFICATION DATE	DELIVERY MODE
10/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents.admin@dowcorning.com

Office Action Summary	Application No.	Applicant(s)	
	10/552,240	DANIELSON ET AL.	
	Examiner	Art Unit	
	Charles E. Cooley	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 October 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20051007*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

NON-FINAL OFFICE ACTION

1. This application has been reassigned to Technology Center 1700, Art Unit 1797 and the following will apply for this application:

Please direct all written correspondence with the correct application serial number for this application to **Art Unit 1797**.

Telephone inquiries regarding this application should be directed to the Electronic Business Center (EBC) at http://www.uspto.gov/ebc/index.html or 1-866-217-9197 or to the Examiner at (571) 272-1139. All official facsimiles should be transmitted to the centralized fax receiving number 571-273-8300.

Priority

2. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. § 119(e).

Information Disclosure Statement

3. Note the attached PTO-1449 form submitted with the Information Disclosure Statement filed 7 OCT 2005.

Specification

4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required. The PCT abstract is not considered a proper abstract for IFW purposes. The PCT abstract also contains prohibited legal phraseology such as "means".

Claim Rejections - 35 USC § 103

6. The terms used in this respect are given their broadest reasonable interpretation in their ordinary usage in context as they would be understood by one of ordinary skill in the art, in light of the written description in the specification, including the drawings, without reading into the claim any disclosed limitation or particular embodiment. See, e.g., *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000); *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22 (Fed. Cir. 1989). The Examiner interprets claims as broadly as reasonable in view of the specification, but does not read limitations from the specification into a claim. *Elekta Instr. S.A.v.O.U.R. Sci. Int'l, Inc.*, 214 F.3d 1302, 1307 (Fed. Cir. 2000).

7. To determine whether subject matter would have been obvious, "the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved .... Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the

circumstances surrounding the origin of the subject matter sought to be patented."

Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966).

The Supreme Court has noted:

> Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1740-41 (2007). "Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." (Id. at 1742).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langeman (US 5,388,761) in view of Reynolds (US 4,915,160).

Langeman discloses a mixing apparatus comprising a mixing device 84; servo motor driven pumps 24A, 24B; supply means 22A, 22B, 46A, 46B for supplying materials to the pumps; mixture dispensing means 26; a computer 32A, 32B so constructed and arranged to control the operation of the servo motor driven pumps so that a predetermined ratio of RPM between the servo motor driven pumps for the is maintained irrespective of pressure surges in the supply means (col. 7, lines 43-50); temperature control means 36A, 36B.

Langeman does not disclose temperature compensation algorithm means for compensating fluctuations occurring in the temperature of at least one of the components of the mixture.

The patent to Reynolds teaches a mixing apparatus comprising a mixing device 6; servo motor driven pumps 4, 5; supply means (Fig. 1) for supplying materials to the pumps; mixture dispensing means 1; a computer 12, 15 so constructed and arranged to control the operation of the servo motor driven pumps (Fig. 2); and temperature compensation algorithm means 11, 14, 16, 17, 18 for compensating for fluctuations in the temperature of one of mixture components. It would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention

was made, to have provided the mixing apparatus of Langeman with temperature compensation algorithm means as taught by Reynolds for the purposes of providing temperature data to the computer indicative of the temperature of one or more of the mixture components such that the feed rate of one or more of the components fed to the mixer via the pumps is controlled to achieve a desired mixture over a range of temperatures (col. 3, line 60 – col. 4, line 47 and col. 5, lines 8-28).

Regarding claims 2-3, the substances worked upon does not limit apparatus claims and is not a major consideration when determining the patentability of said apparatus claims (MPEP 2115). "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." *In re Young*, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). Accordingly, the recited elastomer and pigment of claims 2-3 does not limit the scope of the claimed apparatus.

Regarding claim 4, the recited ratio is but a method of operation of the pumps which does not limit the claimed apparatus. Nevertheless, Langeman clearly teaches the operational step of setting a desired ratio between the speeds of the motors/pumps at col. 8, line 66-68.

11. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carson (US 4,493,286) in view of Reynolds (US 4,915,160).

Carson discloses a mixing apparatus comprising a mixing device 28; servo motor driven pumps 36, 40; supply means 14, 16, 38, 42 for supplying materials to the pumps; mixture dispensing means 32; a computer 88 and/or 90 so constructed and arranged to control the operation of the servo motor driven pumps so that a predetermined ratio of RPM between the servo motor driven pumps for the is maintained irrespective of pressure surges in the supply means (col. 2, lines 7-31; col. 4, lines 40-65; and col. 5, lines 36-42).

Carson does not disclose temperature compensation algorithm means for compensating fluctuations occurring in the temperature of at least one of the components of the mixture.

The patent to Reynolds teaches a mixing apparatus comprising a mixing device 6; servo motor driven pumps 4, 5; supply means (Fig. 1) for supplying materials to the pumps; mixture dispensing means 1; a computer 12, 15 so constructed and arranged to control the operation of the servo motor driven pumps (Fig. 2); and temperature compensation algorithm means 11, 14, 16, 17, 18 for compensating for fluctuations in the temperature of one of mixture components. It would have been obvious and mere common sense to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the mixing apparatus of Carson with temperature compensation algorithm means as taught by Reynolds for the purposes of providing temperature data to the computer indicative of the temperature of one or more of the

mixture components such that the feed rate of one or more of the components fed to the mixer via the pumps is controlled to achieve a desired mixture over a range of temperatures (col. 3, line 60 – col. 4, line 47 and col. 5, lines 8-28).

Regarding claims 2-3, the substances worked upon does not limit apparatus claims as noted above.

Regarding claim 4, the recited ratio is but a method of operation of the pumps which does not limit the claimed apparatus. Nevertheless, Carson clearly teaches the operational step of setting a desired ratio between the speeds of the motors/pumps at col. 2, lines 67-68; col. 3, lines 16-20; and col. 4, lines 40-45).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited prior art discloses proportional mixing systems.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley in Art Unit 1797 whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri.. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles E. Cooley/

Charles E. Cooley
Primary Examiner
Art Unit 1797

1 October 2008